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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/587,960 06/06/2000		Kar W. Yung	PD-200066	9611
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Please find below and/or attached an Office communication concerning this application or proceeding.

					
	•	Application No.		Applicant(s)	
	000 4 00 0	09/587,960		YUNG ET AL.	
	Office Action Summary	Examiner		Art Unit	· · ·
		Thang Q Le	1	2683	
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THE - External control contr	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply of period for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	i6(a). In no event, however within the statutory minim ill apply and will expire SI cause the application to b	er, may a reply be time num of thirty (30) days X (6) MONTHS from the Decome ABANDONED	ly filed will be considered timely. he mailing date of this com (35 U.S.C. § 133).	munication.
1)⊠	Responsive to communication(s) filed on 06 J	<u>une 2000</u> .			
2a) <u></u> □	This action is FINAL . 2b)⊠ Thi	s action is non-fina	al.		
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.,	Claim(s) <u>1-21</u> is/are pending in the application				
	4a) Of the above claim(s) is/are withdraw	n from considerat	tion.		
·	Claim(s) is/are allowed.				
	Claim(s) <u>1-7 and 9-21</u> is/are rejected.				
	Claim(s) <u>8</u> is/are objected to.				
	Claim(s) are subject to restriction and/or on Papers	election requirem	ent.		
	The specification is objected to by the Examiner				
	The drawing(s) filed on is/are: a) accep		to by the Exam	iner	
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11) 🔲 -				ed by the Examiner.	
	If approved, corrected drawings are required in rep			- , <u></u>	
12) 🔲 🗀	The oath or declaration is objected to by the Exa	miner.			
Priority u	inder 35 U.S.C. §§ 119 and 120				
	Acknowledgment is made of a claim for foreign	priority under 35 l	J.S.C. § 119(a)-	(d) or (f).	
_	☐ All b)☐ Some * c)☐ None of:	,,	3(2)	(=) = (()	
·	1. ☐ Certified copies of the priority documents	have been receiv	ed.		
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2) 🔲 Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>9</u> .		otice of Informal Pa	PTO-413) Paper No(s). tent Application (PTO-1	

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DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silberger et al (US 6028884) in view of Dai (US 6298238 B1) and Prieto, Jr. et al (US 6381228 B1)

1. As to claim 1, Silberger teaches a method for allocating system resources in a multi-platform communication system, comprising:

providing a plurality of individual transponding nodes (see fig.2 and col.7; lines 35-62); assigning each of said plurality of remote users one or more resource cells in platform-code space depending upon service requirements of each of said plurality of remote users (col.7; line 20-col. 8; lines 38);

wherein each resource cell assigned to a particular user enables him to transmit signals to or from the hub through a particular one of said transponder nodes and using a particular code (col.7; line 20 -col.8; line 38). The user (222) transmits signals to the hub (224) through a particular transponder node (214) and using a particular code that is assigned to the user.

Silberger fails to show steps of processing a plurality of local user signals at a ground hub to compensate for differential propagation delays to any one of a plurality of remote users and

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assigning each of said plurality of remote users a profit value, which is dependent upon certain predetermined user criteria;

However, Dai teaches that a ground hub is used to compensate for differential propagation delays to any one of a plurality of remote users (fig. 5 and col.9; line 66-col.10; line 23). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Dai to the system of Silberger in order to increase accuracy in communication links.

Silberger and Dai fails to disclose the step of assigning of each of said plurality of remote users a profit value, which is dependent upon certain predetermined user criteria. However, Prieto teaches a method that can decides whether to grant, deny or delay the services request of users based on predetermined user criteria (col.4; line 55-col.5; line 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the method of Prieto into the combined method of Silberger and Dai in order to determine the effective or equivalent available bandwidth capacity for particular user based on predetermined user criteria so as to improve communication system.

- 2. As to claims 2, Silberger teaches transponding nodes are high altitude platform system (See fig. 2 and col. 7; lines 35-62).
- 3. As to claims 5 and 6, Silberger teaches said system utilizes a FDMA technique or CDMA technique, Silberger inherently teaches that said system utilizes TDMA technique.
- 4. As to claim 7, Perietto inherently teaches determining a total profit/utility value for the system based partly on said assigned user utility value (col.4; line 55- col.5; line 12).

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Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silberger et al (US 6028884), Dai (US 6298238 B1) and Prieto, Jr. et al (US 6381228 B1) as applied to claim 1 above, and further in view of Coleman (US 6205320 B1).

5. As to claim 3, Silberger, Dai and Prieto fail to disclose high altitude platform system is comprised of a plurality of manned/unmanned airships. However, Coleman teaches high altitude platform system is comprised of a plurality of manned/unmanned airships (see col.2; lines 38-41 or col.3; lines 31-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Coleman to the combined method of Silberger, Dai and Prieto in order to provide used low cost communication devices for use in communication system.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silberger et al (US 6028884), Dai (US 6298238 B1) and Prieto, Jr. et al (US 6381228 B1) as applied to claim 1 above, and further in view of Lemelson et al (US 6084510)

6. As to claim 4, Silberger, Dai and Prieto fail to disclose high altitude platform system is comprised of a plurality of high altitude balloons. However, Lemelson teaches high altitude platform system is comprised of a plurality of high altitude balloons (fig. 1 and col.8; line 48-col.9; line 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Lemelson to the combined method of Silberger, Dai and Prieto in order to provide used low cost communication devices for use in communication system.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silberger et al (US 6028884) in view of Prieto, Jr. et al (US 6381228 B1)

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7. As to claim 9, Silberger teaches mobile wireless communication system for a variety of different mobile user types (col.7; lines 9-18) comprising:

a plurality of individual transponding nodes (see fig.2 and col.7; lines 35-62);

a plurality of individual resource cells each associated with a particular one of said plurality of individual transponding nodes and a particular one of a plurality of available codes; (col. 7. line 20- col.8; line 38)

a plurality of mobile terminals, each of which is assigned to operate in one or more of said plurality of individual resource cells (col. 7; lines 20-62). The mobile 222 is assigned to operate in resource cell of transponding node 214 (or 216)

a central hub for establishing links with one or more of said plurality of mobile terminals and for assigning one or more of said resource cells to each of said plurality of mobile terminals (col. 7. lines 20-34; col.8; lines 5-38).

Silberger fails to disclose the profit value assigned to each of plurality of mobile terminals and a central hub for assigning said profit value to each of said plurality of mobile terminals. However, Prieto teaches a method that can decides whether to grant, deny or delay the services request of users based on predetermined user criteria (col.4; line 55-col.5; line 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the method of Prieto into the method of Silberger in order to determine the effective or equivalent available bandwidth capacity for particular user based on predetermined user criteria so as to improve communication system.

8. As to claim 10, Silberger teaches central hub establishes links to users (220 and 222) through one or more (214 and 216) of said plurality of transponding nodes wherein the specific

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transponding node and code used to complete each of said links are determined by said resource cells assigned to said user (col.7; line 20 -col.8; line 38)

- 9. As to claim 12, Silberger teaches transponding node is a high altitude platform system.
- 10. As to claim 15, Prieto teaches the system priority is given to users having a preselected profit value to avoid congestion state of the destination downlink port, so the profit of system is maximized.
- 11. As to claim 16, Silberger inherently teaches power to a particular one of said plurality of mobile terminals is increased by increasing the number of said plurality of platforms assigned to said particular user (col. 9; lines 44-53). Power (321 or 320) to mobile terminals is supplied to detect pilot signal, which is transmitted by particular platform to the terminals (col. 8; lines 5-14). Therefore, the power is increased when more pilot signals sent to the user terminal or more platform assigned to the user terminal.
- As to claim 17, Silberger teaches mobile terminal (222) is assigned resource cells (of 216) in platform-code space for said return link (to hub 226) that are different from said resource cells (of 214) in platform-code space assigned for said forward link (from hub 226).(
 See fig. 2 and col.7; lines 35-62).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silberger et al (US 6028884) in view of Dai (US 6298238 B1) and Prieto, Jr. et al (US 6381228 B1)

13. As to claim 11, Silberger and Prieto fail to disclose said central hub pre-processes signals for forward link transmission such that they are radiated with compensating time delays to an intended one of said plurality of mobile users who coherently receives all such signals intended for him; and

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wherein said central hub post-processes received signals to introduce compensating time delays such that all such signals received from a particular remote user may be coherently processed together.

However, Dai teaches a method for compensating time delay in which said central hub pre-processes signals for forward link transmission such that they are radiated with compensating time delays to an intended one of said plurality of mobile users who coherently receives all such signals intended for him (see fig. 1, 5 and col. 9; line 66- col. 10; line 23); and

wherein said central hub post-processes received signals to introduce compensating time delays such that all such signals received from a particular remote user may be coherently processed together.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Dai to the combined method of Silberger and Prieto in order to increase accuracy in communication links.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silberger et al (US 6028884) and Prieto, Jr. et al (US 6381228 B1) as applied to claim 9 above, and further in view of Coleman (US 6205320 B1).

14. As to claim 13, Silberger and Prieto fail to disclose high altitude platform system is comprised of a plurality of manned/unmanned airships. However, Coleman teaches high altitude platform system is comprised of a plurality of manned/unmanned airships (see col.2; lines 38-41 or col.3; lines 31-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Coleman to the combined method of

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Silberger and Prieto in order to provide used low cost communication devices for use in communication system.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silberger et al (US 6028884) and Prieto, Jr. et al (US 6381228 B1) as applied to claim 9 above, and further in view of Lemelson et al (US 6084510)

15. As to claim 14, Silberger and Prieto fail to disclose high altitude platform system is comprised of a plurality of high altitude balloons. However, Lemelson teaches high altitude platform system is comprised of a plurality of high altitude balloons (fig. 1 and col. 8; line 48-col. 9; line 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teachings of Lemelson to the combined method of Silberger and Prieto in order to provide used low cost communication devices for use in communication system.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silberger et al (US 6028884) in view of Prieto, Jr. et al (US 6381228 B1)

16. As to claim 18, Silberger teaches method for allocating system resources in a multi-platform communication system, comprising:

providing a plurality of mobile users (see fig.2 and col.7; lines 35-62);

establishing a link between each of said plurality of mobile users and a ground hub through one or more of a plurality of transponding nodes (see fig.2 and col.7; lines 35-62);

processing a plurality of local user signals at said ground hub (see fig.2 and col.7; lines 35-62);

transmitting signals to or from said ground hub through one or more of said transponder modes and one or more resource cells (see fig.2 and col.7; lines 20-62).

Silberger fails to show the step of assigning each of said plurality of mobile users an individual profit value indicative of a particular type of service requested by said mobile user. However, Prieto teaches a method that can decides whether to grant, deny or delay the services request of users based on predetermined user criteria and the type of service of the user (col.4; line 55-col.5; line 12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the method of Prieto into the method of Silberger in order to determine the effective or equivalent available bandwidth capacity for particular user based on predetermined user criteria so as to improve communication system.

- 17. As to claim 19, Silberger teaches that each of said plurality of transponding nodes is a high altitude platform system (see fig.2 and col.7; lines 35-62)
- 18. As to claim 20, Silberger teaches the step of assigning each of said plurality of mobile users one or more of said resource cells, which are each associated with a particular one of said plurality of transponding modes and a particular one of a plurality of available codes (col.7; line 20-col. 8; line 38).
- 19. As to claim 21, Prieto inherently teaches the step of determining a total profit/utility value for the system based partly on said assigned mobile user profit value (col.4; line 55- col.5; line 12).

Allowable Subject Matter

20. Claim 8 is objected to as being dependent upon a rejected base claim 6, but would be allowable if rewritten in independent form including all of the limitations of the base claim and

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any intervening claims. The following is an examiner's statement of reasons for allowance: The prior art of record does not disclose or render obvious a motivation to provide constraints in the

claim 8.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thang Q Le whose telephone number is (703)305-4367. The examiner can normally be reached on Monday-Friday 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703)308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)308-5403 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

THANG LE September 3, 2002 WILLIAM TROST SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600

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PATENT APPLICATION

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Form PTO-1449	Serial Number	i i	
	09/587,960	200066	
INFORMATION DISCLOSURE	Applicant		
STATEMENT BY APPLICANT	KAR YUNG ET. AL		
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U.S. PATENT DOCUMENTS

Document Number	Date	Name	Class	Sub Class

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Name		Class	Sub Class	
OTHER	R DOCU	MENTS (including	Author, Title,	Date, Pertinent Pages, etc	.)			
TL		Telecommunications	Conference,	IA System With Active Array A 1991; Globecom '91, vol. 3, De	c. 2-5, 1991, pp.			
TL		Chiba, Isamu et. al, "Digital Beam Forming (DBF) Antenna System for Mobile Communications", IEEE AES Systems Magazine, Sept. 1997, pp. 31-41.						
TL		Miura, Ryu et. al, "A DBF Self-Beam Steering Array Antenna for Mobile Satellite Applications Using Beam-Space Maximal-Ratio Combination", IEEE Trans. On Vehicular Technology, vol. 48, no. 3, May 1999, pp. 665-675.						
TL		Sato, Kazuo et al., "Development And Field Experiments of Phased Array Antenna For Land Vehicle Satellite Communications", IEEE Antennas and Propagation Society International Symposium, 1992, July 1992, pp. 1073-1076.						
TL		Sakakibara, Kunio et. al, "A Two-Beam Slotted Leaky Waveguide Array for Mobile Reception of Dual-Polarization DBS", IEEE Transactions on Vehicular Technology, vol. 48, no. 1, Jan. 1999, pp. 1-7						
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T.L	1	5,010,330	04/23/91	Snowde	en et al.				
TL	2	5,740,549	04/14/98	Reilly 6	et al.			~	
TL	3	5,895,471	04/20/99	King et	t al.			10.10	Č _S
T L	4	5,905,719	05/18/99	Arnold	et al.		C/I	20/2	2 0
TL	5	5,926,104	07/20/99	Robins	on			OJ Con	300 T
TL	6	5,936,548	08/10/99	Takats	uka			Nov 2 3	-00g
TL.	7	5,949,326	09/07/99	Wicks	et al.				
TL	8	5,991,760	11/23/99	Gauvin	et al.				
TL	9	6,014,560	01/11/00	Krame	r				
TL	10	6,249,668	06/19/01	Abe et	al.				
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	(Use several sheets if necessary)	Filing Date June 6, 2000	Group 2683

U.S. PATENT DOCUMENTS

	Document Number	Date	Name	Class	Sub Class
TL	2,470,787	05/24/49	Nosker	342	12
TL	3,720,953	03/13/73	Ajioka	343	771
TL	4,635,063	01/06/87	Chang et. al	342	380
TL	4,979,170	12/18/90	Gilhousen et al.	370	104.1
TL	5,017,927	05/21/91	Agrawal et. al	342	371
TL	5,077,562	12/31/91	Chang et. al	342	368
ML	5,218,619	6/8/93	Dent	375	. 1
CA_	5,550,809	8/27/96	Bottomley et. al	370	18
2.76	5,555,257	9/10/96	Dent	370	95.1
TL	5,572,216	11/05/96	Weinberg et al.	342	357
276	5,592,471	01/07/97	Briskman	455	52.3
OOTL	5,594,941	1/14/97	Dent	455	13.4
_TL	5,612,701	03/18/97	Diekelman	342	354
TL	5,790,070	08/04/98	Natarajan et al.	342	354
TL	5,810,284	9/22/98	Hibbs et. al	244	13
71	5,856,804	01/05/99	Turcotte et al.	342	371
TL	5,867,109	02/02/99	Wiedeman	340	827
TL	5,903,549	05/11/99	Von der Embse et. al	370	310
TL	5,909,460	6/1/99	Dent	375	200
TL	5,917,447	06/29/99	Wang et. al	342	383
TL	5,973,647	10/26/99	Barrett et. al	343	713
TL	6,111,542	08/29/00	Day et al.	342	359
TZ	6,147,658	11/14/00	Higashi et. al	343	853

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Name	Class	Sub Class
		EP0682 416 A	11/15/95	LORAL QUALCOMM SATELLITE SERVICES, INC.		
	. 0	THER DOCUMEN	TS (includin	g Author, Title, Date, Pertinent Pages, etc	;.)	
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Form PTO-1449	Serial Number 09/587,960	Docket 200066
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Applicant Kar W. Yung et al.	
(Use several sheets if necessary)	Filing Date June 6, 2000	Group 2683

U.S. PATENT DOCUMENTS

	Document	Date	Name	Class	Sub
	Number				Class
TL	5,444,450	8/22/95	Olds, et al.	342	357
TL	3,544,995	12/1/70	Bottenberg, et al.	342	46
TL	3,384,891	5/1/68	Anderson	342	357
TL	5,387,916	2/7/95	Cohn	342	44
TL	4,897,661	1/30/90	Hiraiwa	342	457
TL	5,006,855	4/9/91	Braff	342	357
TU	4,359,733	11/16/82	O'Neill	343	6.5
74	4,161,734	7/17/79	Anderson	342	352
TL	4,613,864	9/23/86	Hofgen	343	357
TL	4,994,809	2/19/91	Yung, et al.	342	108
TL	5,099,245	3/24/92	Sagey	342	357
TL	5,410,314	4/25/95	Frush, et al.	342	26
TU	5,525,995	6/11/96	Benner	342	90
TL	4,161,730	7/17/79	Anderson	342	352
TL	2,470,787	5/24/49	Nosker	342	12
π	5,126,748	6/30/92	Ames et al.	342	353
72	5,920,284	7/6/99	Victor	342	357.01
TL	5,944,770	8/31/99	Enge et al.	701	707
TU	5,945,948	8/31/99	Buford et al.	342	457
74	5,969,674	10/19/99	Von der Embse et al.	342	357.17
TL	5,111,209	5/5/92	Toriyama	342	357
TL	5,739,785	3/14/98	Allison et al.	342	357

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Name	Class	Sub Class
74	EP 0 335 558	4/10/89	McCaughan et al.		
hu	JP3-291584	12/20/91	Toyota	ᅻ	
	JP 09026328	01/28/97	Tokimec Inc.	Tecr	
174	JP 2-28580		Mitsubishi Electric Corp (Yamazaki)	2	
171	JP 4-27887		Corresponding to USP 5,111,209	<u> </u>	P
1	JP 07146995A	06/06/95	Nippondenso Co. LTD (Fumiaki)	y	
71	JP 08015405A	01/19/96	NEC Corp (Toshiaki)	Ce	
m	JP 09113600A	05/02/97	Aqueous Res:KK (Hiroki)	n t e	2
加	JP 10090391A	04/10/98	Sharp Corp (Koichi, et al.)	7.2	
TI	GB 2 306 827 A	05/07/97	Intl Mobile Satellite Org	60	
TT	GB 2 271 902 A	10/20/93	Caterpillar	0	

	是	<u> </u>	
Form PTO-1449	TRADEMARK OF	Serial Number	Docket
	RADEMARTI	09/587,960	200066
INFORMATION DI	SCLOSURE	Applicant	
STATEMENT BY	APPLICANT	Kar W. Yung et al.	
(Use several sheets i	f necessary)	Filing Date	Group
•	* -	June 6, 2000	2683

U.S. PATENT DOCUMENTS

	Document	Date	Name	Class	Sub
	Number				Class
T2	5,485,485	1/1996	Briskman et al.	375	200
TL	3,544,995	12/1970	Bottenburg et al.	343	6
70	5,969,674	10/1999	Von Der Embse et al.	342	357.16
TL	5,644,572	7/1997	Olds et al.	370	324
TL	3,384,891	5/1968	Anderson	343	100
TL	4,819,227	4/1989	Rosen	370	75
TL	5,278,863	1/1994	Briskman	375	1
TL	5,319,673	6/1994	Briskman	375	1
TL	5,592,471	1/1997	Briskman	455	52.3
TL	5,864,579	1/1999	Briskman	375	200
TL	5,233,626	8/1993	Ames	375	1
TL	6,138,012	10/2000	Krutz et al.	455	427
	09/576,652	5/22/00	Hagen et al.		
76	09/584,012	5/30/00	Chang et al.		
TL	09/576,648	5/22/00	Yung et al.		
TL	09/644,225	8/21/00	Hagen et al.		
TL	09/587,759	6/6/00	Yung et al.		
TL	09/271,997	3/18/99	Chang et al.		
TL	09/209,062	12/10/98	Yung et al.		
TL	09/550,505	4/17/00	Chang et al.		
TL	08/803,937	2/21/97	Chang et al.		
7	09/669,095	9/25/00	Yung et al.		
TL	09/655,498	9/5/00	Chang et al.		

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Name	Class	Sub Class
	·				

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

Examiner	The	nyk	Date Considered	08/25/02

Application/Control No. Applicant(s)/Patent Under Reexamination 09/587,960 YUNG ET AL. Notice of References Cited Examiner Art Unit Page 1 of 1 Thang Q Le 2683 **U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	Α	US-6298238	10-2001	Dai	455/456
	В	US-6028884	02-2000	Silberger et al	375/200
	C	US-6381228	04-2002	Perieto, Jr.et al	370/323
	D	US-6205320	03-2001	Coleman	455/13.1
	E	US-6084510	07-2000	Lemelson et al	340/539
	F	US-			
	G	US-			
	н	US-			
	ł	US-			
	J	US-			TO
	κ	US-			ES
	L	US-			
	М	US-			AV A
				ODCION DATENT DOCUMENTS	15

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					8
	0					<u>m</u>
	Р					8
	a					P
	R					
	s					
	Т					

NON-PATENT DOCUMENTS

		The state of the s
*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	٧	
	w	
	x	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.